Erigeron basalticus Hoover

basalt daisy

Asteraceae (Aster family)

Status: State Threatened, USFWS Candidate
Rank: G2S2

General Description: *Erigeron basalticus* is a taprooted perennial herb with one to several sprawling or pendent stems per plant. The stems are 4-6 inches long, leafy especially toward the tip. Most of the leaves are about 1 inch in length, wedge-shaped in outline, and three-lobed at the tip. The herbage is glandular and covered with stiff, spreading hairs. Branches are terminated by a single flower. The flowers are typically daisy-like, with white to lilac ray flowers, about 1/4 inch long, surrounding a cluster of small disk flowers.

Identification Tips: There are apparently only 5 other species of *Erigeron* with lobed leaves, none of which occurs within the range of *E. basalticus. E. compositus* and *E. salishii* do occur in Washington. *E. basalticus* differs from both by its lack of a basal cluster of leaves. *E. basalticus* leaves are also generally more deeply and irregularly lobed than those of either of the other two species.

Phenology: Flowering has been reported as early as the first week of May. Peak anthesis occurs typically from late May to the middle of June. Occasional individuals can be found flowering throughout the summer.

Range: *Erigeron basalticus* is known from an area approximately 10 x 2 miles in and adjacent to Yakima Canyon in Yakima and Kittitas counties, Washington. Occurs in the Columbia Basin physiographic province.

Habitat: *Erigeron basalticus* grows in crevices in basalt cliffs on canyon walls, with northerly, easterly and westerly aspects. Elevations range from 1250 to 1500 feet (380 to 460 m). Total vascular vegetative cover is generally less than 1%. The habitat is exclusively on basalt cliffs along the Yakima River and Selah Creek, both of which have cut through basalt from the Yakima Basalt Formation, which occurred during the late Miocene. Although *E. basalticus* typically occurs by itself, other species are commonly found nearby on the basalt cliffs and outcrops. These species include: Columbia goldenweed (*Happlopappus resinosus*), roundleaf alumroot (*Heuchera cylindrica*), Richardson's penstemon

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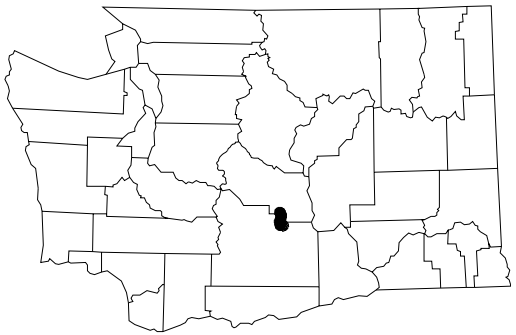
Known distribution of *Erigeron basalticus* in Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat (continued)**:** (*Penstemon richardsonii*), thickleaved thelypody (*Thelypodium laciniatum*), bluegrass (*Poa secunda*), and cheatgrass (*Bromus tectorum*).

Ecology: *Erigeron basalticus* is restricted to cracks in basalt cliffs. The vegetation present in these cracks may contribute to the fracturing of the basalt.

State Status Comments: *Erigeron basalticus* is limited to one population scattered over an area approximately 10 miles x 2 miles.

Inventory Needs: Periodic surveys within the known range should be conducted, particularly when any projects are planned that may affect the species or its habitat. Periodic inventories within similar, nearby, habitats should also be undertaken.

Threats and Management Concerns: The species is threatened by basalt mining and railroad and highway construction and maintenance activities. Maintenance of the physical integrity of the basalt cliffs on which *Erigeron basalticus* grows is of primary importance. Removal of the basalt from these sites should be prohibited. Expansion of Roza Dam and spray drift from adjacent agricultural fields are also potential threats. There is also some potential threat from homesite development.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1955. *Vascular Plants of the Pacific Northwest, Part 5: Compositae.* University of Washington Press, Seattle. 343 pp.

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